



United States Department of Agriculture



[www.biopreferred.gov](http://www.biopreferred.gov)

## May BioPreferred Product of the Month: Metalworking Fluids

Metalworking fluids are designed to provide cooling, lubrication, corrosion prevention and reduced wear on the contact parts of machinery used in metalworking operations such as cutting, drilling, grinding, machining, and tapping. These fluids are used in a re-circulating system for use during metal working operations. There are subcategories for general purpose fluids, high temperature application fluids, and straight oils which do not need to be diluted with water prior to application. Biobased metalworking fluids can be made using vegetable oil and a variety of other plant ingredients.

Some of the advantages of using biobased metalworking fluids are that they are renewable and may be biodegradable, low in toxicity, and low in volatility. Some fluids are food grade.



Photo Credit:

Vascomill product line courtesy of Blaser Swisslube